FINAL

Utah Smoke Management Plan

July 20, 1999
Revised March 23, 2000

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I. PURPOSE

The purpose of this Utah Smoke Management Plan (SMP) is to identify the responsibilities of the Utah Division of Air Quality (DAQ) and Federal, and State land managers (Land Managers) to coordinate procedures that mitigate the impacts of prescribed fire and wildland fire used for resource benefits on public health, public safety and visibility. This plan is designed to meet the requirements of Title R307, Utah=s air quality rules, and the policies of the U.S. Environmental Protection Agency=s (EPA) Interim Air Quality Policy on Wildland and Prescribed Fires (Interim Policy). On November 8, 1999, the EPA certified the plan under the Interim Policy. The SMP may be revised at the end of the 1999 fall burning season and each year thereafter with the concurrence of all signatories to the attached Memorandum of Understanding.

II. GOALS

- To minimize or prevent smoke impacts to such a degree as possible to protect public health, public safety and visibility
- To use prescribed fire and wildland fire used for resource benefits to accomplish land management objectives of wildland fuel hazard reduction, vegetative management, natural ecological practices, and wildlife habitat improvement
- To develop an emission inventory for pollutants of interest based on reports of prescribed fire, wildland fire used for resource benefits, and wildland fire activities
- To develop a system for reporting and coordinating burning operations on all forest and range lands in the State
- To encourage the development and use of alternative methods to burning for disposing of or reducing the amount of wildland fuels on lands in the State

III. SCOPE

The SMP provides direction and operating procedures for all organizations involved in the use of prescribed fire and wildland fire used for resource benefits. It applies to all signatories to the Memorandum of Understanding (MOU), Appendix A. The SMP also applies to landowners who use prescribed fire on lands where the Department of Natural Resources (DNR) provides fire protection during the June-October fire season, with the exception of landowners who use prescribed fire covering less than 20 acres and are permitted through the DNR=s Division of Forestry, Fire and State Lands.

This plan does not apply to agricultural outdoor burning and open burning as defined by Utah Code 19-2-114. All future reference to fire in this plan will refer only to prescribed fire, wildland fire used for resource benefits, and wildland fire unless otherwise indicated. Lands that have been classified as Conservation Reserve Program (CRP) lands, that are adjacent to agriculture lands, will be treated as agricultural lands and will not have to abide by the requirements of the SMP. CRP lands that are adjacent to Federal or State lands will be required to abide by the requirements of the SMP.

IV. DEFINITIONS

Air Quality - the characteristics of the ambient air (all locations accessible to the general public) as indicated by concentrations of the six air pollutants for which national standards have been established (e.g., particulate matter, sulfur dioxide, nitrogen dioxide, ozone, carbon monoxide, and lead), and by visibility in mandatory Federal Class I areas. For the purposes of this Smoke Management Plan, concentrations of particulate matter are taken as the primary indicators of ambient air quality.

Burn Window - the period of time when the prescribed fire is scheduled for ignition.

Conservation Reserve Program (CRP): lands that have been set aside for the specific purpose of conversion from farming lands to wildlands.

Class I Areas - an area set aside under 42 U.S.C. 7491 to receive the most stringent protection from air quality degradation. Mandatory Class I Federal areas are: 1) international parks, 2) national wilderness areas which exceed 5,000 acres in size, 3) national memorial parks which exceed 5,000 acres in size, and 4) national parks which exceed 6,000 acres and were in existence on August 7, 1977. The extent of a mandatory Class I Federal area includes subsequent changes in boundaries, such as park expansions. The five Class I Areas in Utah include: 1) Zion National Park, Bryce National Park, Capitol Reef National Park, Arches National Park, Canyonlands National Park.

Clearing Index - an indicator of the predicted rate of clearance of ground level pollutants from a given area. This number is calculated by the National Weather Service from daily measurements of temperature lapse rates and wind speeds from ground level to 10,000 feet.

De minimis - refers to the minimum or least.

Duff - the partly decayed organic matter on the forest floor.

Eastern Great Basin Coordination Center (EGBCC) - the center established to provide an interagency approach to wildland fire management in the area within the Eastern Great Basin Area defined as that area including state and federal agency lands within the established Forest Service Intermountain Region geographic boundary of southern Idaho; western Wyoming including the Bridger-Teton National Forest, and Teton National Park; all lands within the state of Utah; and the Arizona Strip Field Office of the BLM. Participating agencies include: the Intermountain Region of the U.S. Forest Service; the Rocky Mountain Region of the National Park Service; the Idaho, Utah, and Wyoming Offices of the Bureau of Land Management; the Phoenix, Portland, Albuquerque Area and Navajo Area Offices of Bureau of Indian Affairs; the Mountain and Prairie Region of the U.S. Fish and Wildlife Service; the State of Idaho Department of Lands; and the State of Utah Division of State Lands and Forestry.

Emission - the act of discharge into the atmosphere of an air contaminant or an effluent which contains or may contain an air contaminant; or the effluent so discharged into the atmosphere.

Fire prescription - the measurable criteria that define conditions under which a prescribed fire may be

ignited, guide selection of appropriate management responses, and indicate other required actions. Prescription criteria may include safety, economic, public health, environmental, geographic, administrative, social, or legal considerations.

Fuel Loading - the amount of fuel present expressed quantitatively in terms of weight of fuel per unit area. This may be available fuel or (consumable fuel) total fuel and is usually dry weight.

Land Manager - includes any federal, state, local or private entity that administers, directs, oversees or controls the use of public or private land, including the application of fire to the land.

National Ambient Air Quality Standards (NAAQS) - the standards for maximum acceptable concentrations of pollutants in the ambient air to protect public health with an adequate margin of safety, and to protect public welfare from any known or anticipated adverse effects of such pollutants (e.g., visibility impairment, soiling, materials damage, etc.) in the ambient air. National standards have been established for particulate matter, sulfur dioxide, nitrogen dioxide, ozone, carbon monoxide, and lead, and are specified in 40 CFR Part 50.

Non-attainment Area - Aan area which is shown by monitored data or which is calculated by air quality modeling (or other methods determined by the Administrator, EPA to be reliable) to exceed any National Ambient Air Quality Standard for such pollutant≅ and includes any area designated as non-attainment under 42 U.S.C. 7407.

Particulate matter - the liquid or solid particles such as dust, smoke, mist, or smog found in air emissions.

Prescribed fire/Prescribed burn - any fire ignited by management actions to meet specific objectives (i.e., managed to achieve resource benefits).

Prescribed fire plan/burn plan - the plan required for each fire application ignited by managers. It must be prepared by qualified personnel and approved by the appropriate agency administrator prior to implementation. Each plan follows specific agency direction and must include critical elements described in agency manuals.

Smoke Program Coordinator - the decision making authority that provides the daily coordination between members of the Airshed Group and the communication necessary to implement necessary burning restrictions.

Resource Benefit Fire - a lightning-caused fire that is being allowed to burn because it meets land management objectives.

Smoke management - includes but is not limited to techniques to reduce emissions and smoke impacts, to identify and avoid smoke sensitive receptors, to monitor and evaluate the smoke impacts of each burn, and to coordinate among land management agencies to minimize cumulative impacts.

Synoptic - relating to or displaying atmospheric or weather conditions as they exist simultaneously over a broad area.

Smoke sensitive receptors - population centers such as towns and villages, campgrounds and trails, hospitals, nursing homes, schools, roads, airports, mandatory Class I Federal areas, Non-attainment areas, areas whose air quality monitoring data indicate pollutant levels that are close to health standards, etc. where smoke and air pollutants can adversely affect public health, safety and welfare.

Utah Airshed Group - a group composed of the representatives of the agencies that are signatories to the MOU, Appendix A, that are involved in the use of prescribed fire, and wildland fire used for resource benefits to meet land management objectives. This group meets at least once a year to evaluate the effectiveness of the SMP.

Utah Airshed Oversight Group - a group composed of managerial representatives of the agencies that are signatories to the MOU, Appendix B, that conduct performance evaluations of the Smoke Program Coordinator.

www.utahsmp.net - the home page for the Utah Interagency Smoke Management Program.

Wildland - an area in which development is essentially non-existent, except for pipelines, power lines, roads, railroads, or other transportation or conveyance facilities.

Wildland fire - any non-structure fire, other than prescribed fire, that occurs in the wildland.

Wildland fire implementation plan (WFIP) - a progressively developed assessment and operational management plan that documents the analysis and selection of strategies and describes the appropriate management response for a wildland fire being managed for resource benefits. A full WFIP consists of three stages. Different levels of completion may occur for differing management strategies (i.e., fires managed for resource benefits will have two-three stages of the WFIP completed while some fires that receive a suppression response may only have a portion of Stage I completed).

Wildland fire used for resource benefits (WFURB) - the management of naturally ignited wildland fires to accomplish specific prestated resource management objectives in predefined geographic areas.

Wildland fuel - an association of naturally occurring plant materials that occur at ground, surface, and aerial strata, with the elements of distinctive species.

V. ORGANIZATION AND OPERATING PROCEDURES

A. The Utah Smoke Management Program is a cooperative effort between the DAQ and the agencies that are involved in the use of prescribed fire and wildland fire used for resource benefits to meet land management objectives. The organizational structure developed to operate the Smoke Management Program consists of a Smoke Program Coordinator, Utah Airshed Group and Utah Airshed Oversight Group.

B. Each signatory of the MOU, Appendix A, receives full membership in the Utah Airshed Group. This group, composed of representatives of the entire membership, meets at least once a year to evaluate the effectiveness of the SMP. Specifically, the role of the Utah Airshed Group is to:

1) provide overall management direction and guidance to the Smoke Program Coordinator by functioning as an interagency steering committee to ensure appropriate implementation of the SMP;
2) review and evaluate the results of the previous burning season and prescribed fires planned for next five years;
3) review procedures in the SMP and make revisions if necessary;
4) advise on appropriate boundaries for airsheds and impact zones (see Appendix E);
5) work towards resolving interairshed and interstate smoke problems;
6) review operating costs of the smoke management program;
7) provide smoke management training for agencies;
8) prepare and disseminate information on prescribed fire, wildland fire, wildland fire used for resource benefits, and air quality; and
9) review and evaluate dispersion and emission reduction techniques**.**

C. The Smoke Program Coordinator is responsible for the daily operation and management of the SMP. The Smoke Program Coordinator is the decision making authority that provides the daily coordination among all signatories to the MOU and the communication necessary to implement, after consulting with the DAQ, necessary burn approval or denial decisions. The Smoke Program Coordinator will rely on forecast meteorological information from the National Weather Service, DAQ, and others, in addition to air quality data from the DAQ=s Air Monitoring Center, and burn plan information or other information from Land Managers to make burn approval or denial decisions.

Specifically, the role of the Smoke Program Coordinator will be to:

1) develop smoke forecasts for prescribed fire and wildland fire used for resource benefits activities, utilizing the information to develop zones where burning may or may not be approved, and evaluate smoke effects between zones;

2) provide ongoing coordination and communication with the DAQ and other signatory parties;

3) coordinate monitoring of compliance with National Ambient Air Quality Standards with the DAQ=s Air Monitoring Center staff;

4) act as liaison with all participating agencies, developing direction for interagency cooperation;

5) assess the potential impact of wildland fuel conditions, weather and other factors on potential smoke production;

6) encourage use of appropriate technology to develop and assess potential impacts of smoke production from wildland fire used for resource benefits, wildland fire and prescribed fire activities;

7) schedule prescribed fire project while protecting air quality;

8) coordinate operations and findings with counterparts on inter-state basis;

9) coordinate with the National Weather Service, DAQ, and others to assess meteorological and

climatological data to mitigate impacts from fire activities on Utah airsheds;

10) develop a database for: a) tracking whether emission reduction and smoke dispersion objectives were met for prescribed fires and wildland fire used for resource benefits, b) establishing particulate matter or other air pollutant(s) emissions inventory and c) documenting contribution to NAAQS violations, if any, based on monitoring information submitted by Land Managers to the Smoke Program Coordinator at DAQ and other data;

11) submitting an annual report summarizing the information listed in #10 to the Utah Airshed Group for review and approval by March 15 each year for the preceding calendar year; and

12) receive direction and oversight from the Utah Airshed Oversight Group.

D. Funding

Current funding for the Smoke Program Coordinator position and support functions will be provided through and in accordance with the existing Interagency Agreement for the management of the Eastern Great Basin Coordination Center (see Appendix C). A separate document specifying the Smoke Program Coordinator responsibilities and funding is included in Appendix B.

VI. PRESCRIBED FIRE REQUIREMENTS

A. Utah Annual Burn Schedule (Form 2)

1) Each calendar year, Land Managers who burn more than 50 acres per year are required to submit to the Smoke Program Coordinator at the DAQ the Utah Annual Burn Schedule (see Form 2) of prescribed fires that are scheduled to be completed that calendar year, including the following information: project number, project name, Air Quality Basin, location (UTM coordinate for the central point of the prescribed fire), de minimis category, total project acres, project elevation, major fuel model, type of burn (understory, broadcast, etc.), earliest burn date, burn duration, ignition method (helitorch, hand drip torch, etc.), and county.

2) The proposed Utah Annual Burn Schedule (see Form 2) should be submitted between January 1 and March 15 each year.

B. De minimis Prescribed Fires

This category is intended for clean-up activities that have negligible air quality impacts. A review of this category will be conducted by the Utah Airshed Group annually.

1) Applicability

This category applies to:

a) prescribed fires covering up to 20 acres/day or resulting in air emissions of less than 0.5 tons of particulate matter per day.

2) Requirements

a) The Land Manager is required to notify the Smoke Program Coordinator by fax, e-mail, or phone the morning of the burn.

b) The Land Manager is required to record the de minimis prescribed fire on the Utah Annual Burn Schedule (Form 2).

c) Ignition can only occur when the Weather Service Clearing Index is above 500.

C. Prescribed Fires Requiring Burn Plans--Form 3: Pre-Burn Information (prescribed fires covering more than 20 acres/day or producing emissions of more than 0.5 tons of particulate matter per day)

Land Managers are required to submit the Pre-burn Information (see Form 3) in addition to the agency burn plan to the Smoke Program Coordinator at the DAQ by fax, e-mail, or mail, two weeks before the beginning of the ignition window. Land Managers are required to submit the Burn Request (see Form 4) to the Program Coordinator before the ignition of prescribed fires requiring burn plans.

1) Applicability

This category applies to:

a) prescribed fires covering more than 20 acres or resulting in air emissions more than 0.5 tons of particulate matter per day.

2) Burn Plan Elements

The completed Pre-burn Information (see Form 3) must be submitted to the Smoke Program Coordinator at DAQ for the evaluation of Smoke Management components at least two weeks before the beginning of the ignition window and must contain the following information:

a) the three-letter ID, project number, date submitted, name of person submitting the form, Burn Manager, and phone numbers;
b) summary of burn objectives;
c) Class I or Non-attainment Area within 15 miles;
d) sensitive receptors and distance/degrees from project site;
e) planned mitigation methods (avoidance, dilution, emission reduction);
f) smoke dispersion model used;
g) estimated range of total particulate matter anticipated;
h) optional information on loading and fuel moisture;
i) public notification to be conducted;
j) a map, preferably with a scale of 1:62,500 (see example in Appendix D) depicting both the daytime and nighttime smoke path and down-drainage flow for a minimum of 15 miles from the burn site with smoke-sensitive areas delineated;
k) safety and contingency plans for addressing any smoke intrustions, and
l) if fire is in nonattainment or maintenance area, a copy of conformity demonstration showing that the fire meets the requirements of the Clean Air Act, including the provision of section

176(c), indicating that the fire conforms with the applicable State Implementation Plan.

3) Prescribed fires that are delayed or not completed following burn approval do not need to be resubmitted to the Smoke Program Coordinator unless changes are made to the burn plan. Burn plans will be retained by the Smoke Program Coordinator until the project is completed. If an approved project is not carried out, the Land Manager will describe reason(s) why the prescribed fire was not completed (at bottom of Burn Request, Form 4) and submit Form 4 to the Smoke Program Coordinator by 0800 the following day.

D. Burn Request (Form 4)

1) Land Managers are required to submit a Burn Request (see Form 4) to the Smoke Program Coordinator at DAQ for approval by 1000 hours two business days (Monday - Friday) before the beginning of the planned ignition, <u>not the proposed ignition window</u>. An original form, either faxed or e-mailed are acceptable submittal. Burn requests should include the following information on the burn request form:

a) The three-Letter ID and project number consistent with the Utah Annual Burn Schedule (Form 2) submitted between January 1 and March 15;
b) The date submitted and by whom; and
c) The Burn Manager conducting the burn and phone numbers.

2) The Smoke Program Coordinator will issue a decision after consulting with the DAQ, either approving, approving with conditions, or denying burning by 4:00 pm two business days (Monday - Friday) before the beginning of the planned ignition. The burn approval decision will be given by e-mail, fax, or recorded message. If a Land Manager is not notified of the burn approval decision by 4:00 pm, it is his/her responsibility to contact the Smoke Program Coordinator to determine if burning is authorized.

3) Restrictions to burning may be issued: 1) statewide, 2) by individual Air Quality Basin(s) (see Appendix E), 3) by elevation within an Air Quality Basin; or 4) by portion of individual project.

4) The burn approval decision made by the Smoke Program Coordinator will be made using all available information regarding the prescribed burn, forecast meteorological conditions, and existing air quality. The criteria for making burn approval decisions include, but are not limited to:

a) Analysis of the emissions from prescribed fires in progress and residual emissions from prescribed fires on a day-to-day basis;

b) Analysis of emissions from active wildland fire used for resource benefits and consideration of potential long-term emissions estimates;

c) Analysis of the emissions from wildland fires greater than 100 acres of timber, or 300 acres of brush (grass, brush, pinyon/juniper);

d) Local burn conditions;

e) Fire prescription including smoke management considerations from the applicable Burn Plan;

f) Existing and predicted local air quality;

g) Local and synoptic meteorological conditions;

h) Type and location of areas to be burned;

i) Protection of the national visibility goal for Class I Areas pursuant to 42 U.S.C. 7491 (a) (1);

j) Minimization of smoke impacts in Class I Areas, roads or highways, airports, areas that are non-attainment for particulate matter (see Appendix E), carbon monoxide non-attainment areas, or other smoke-sensitive areas;

k) Protection of the National Ambient Air Quality Standards (NAAQS) pursuant to 40 CFR Part 50; and

l) Analysis of smoke transported from areas outside of Utah.

5) The burn approval decision made by the Smoke Program Coordinator can be rescinded at any time, as outlined in Section IX, Part A, Management of On-going Fires.

E. Emission Reduction & Dispersion Techniques

Each Land Manager conducting prescribed fires will implement as many emission reduction and dispersion techniques as feasible for individual prescribed fires. An evaluation of the emission reduction and dispersion techniques used for individual prescribed fires will be included in the Daily Emission Report submitted by Land Managers to the Smoke Program Coordinator at DAQ. The following emission reduction and dispersion techniques may be considered best smoke management practices:

1) Reducing biomass by use of techniques such as yarding or consolidation of unmerchantable material, multi-product timber sales or public firewood access, when economically or practically feasible, and providing information to the public on the adverse impacts of using green or wet wood as fuel;

2) Burning in seasons characterized by meteorological conditions that allow for good smoke dispersion;

3) Using mass ignition techniques such as aerial ignition by helicopter to produce high intensity fires with short duration impacts;

4) Igniting burns under good-to-excellent ventilation conditions and suspending operations under poor smoke dispersion conditions;

5) Considering smoke impacts and residual smoke on activities conducted by local communities and land users;

6) Burning only those wildland fuels essential to meet management objectives;

7) Minimizing duff consumption, smoldering, and large wildland fuel consumption through wildland fuel moisture considerations;

8) Minimizing dirt content when slash piles are constructed by using brush blades on material-moving equipment and by constructing piles under dry soil conditions or by using hand piling methods;

9) Burning piles when other burns are not feasible, such as when snow or rain is present;

10) Using opportunities that meet the burn prescription at all burn locations to spread smoke impacts over a broader time period and geographic area to minimize smoke impacts to protect public health, public safety and visibility;

11) Burning during optimum periods to prevent trapping smoke in inversions or diurnal wind flow patterns;

12) Consolidating burning material to enhance wildland fuel consumption and to minimize smoke production;

13) Implementing maintenance burning in a periodic rotation mimicking natural fire cycles to reduce excessive wildland fuel accumulations and subsequent excessive smoke production through smoldering or wildfire; and

14) Managing smoke impacts by: a) minimizing smoke impacts to roads, highways, and airports to the amounts, frequencies, and durations consistent with any guidance provided by highway and airport personnel; and b) minimizing smoke impacts to Class I Areas, areas that are non-attainment for particulate (see Appendix F), carbon monoxide non-attainment areas, or other smoke sensitive receptors.

F. Daily Emission Report (Form 5) for Prescribed Fires Requiring Burn Plans

By 0800 the day following the burn, Land Managers are required to submit a Daily Emission Report (see Form 5) for each day of significant prescribed fire activity (covering more than 50 acres) to the Smoke Program Coordinator at DAQ. The Daily Emission Report (Form 5) will be used by the Smoke Program Coordinator to generate an annual report of fire activities. If a burn is not carried out, the Daily Emission Report will be used the following morning by 0800 hours to document why a burn was not carried out. The report will include the following information:

1) The three-letter ID and project number consistent with Form 2;
2) Date submitted and by whom;
3) Burn start date and end date with time;
4) Emission information (black acres, tons fuel consumed per acre, tons particulate matter produced;
5) Public interest regarding smoke;
6) Daytime ventilation;
7) Nighttime smoke behavior;
8) Smoke management prescription or WFIP/Resource Benefit Fire Plan met; and

9) Emission reduction techniques applied.
10) Optional- dead and live fuel moisture information with average depth of fuels.

G. Surveillance/Enforcement

1) Land Managers conducting a prescribed fire will permit DAQ staff to enter and inspect burn sites before, during and after burns, to verify the accuracy of the permit or burn plan information and compliance with the burn plan, if appropriate. Site inspection procedures will be coordinated by the DAQ and the Land Manager for safety purposes prior to any site inspections.

2) All parties are committed to comply with the Clean Air Act and the best management practices available regarding emission production and reduction, and regional haze issues.

3) Failure to comply with the procedures and conditions specified in the permit or burn plan may result in an enforcement action, such as, a cease and desist order.

H. Monitoring

1) Land Managers will monitor effects of the prescribed fire on smoke sensitive receptors, and visibility in Class I Areas. Visual monitoring and documentation of the direction of the smoke plume may be performed using the Hourly Plume Observation Record (Form 6) or your agency equivalent, as needed. Monitoring of nuisance complaints by the public should be noted and recorded in the project file.

2) For large fires expected to last more than one day, or fires close to smoke sensitive receptors, locating real-time particulate matter monitors at smoke sensitive receptors may be warranted to facilitate timely response to smoke impacts. The DAQ will assist in identification of instrumentation, site selection, installation of instrumentation, operation, calibration, quality assurance, quality control, laboratory analysis, data interpretation and supplies. Current technology in the area of monitoring smoke particulates requires setup and calibration of equipment.

3) Land Managers will document information pertinent to prescribed fires requiring burn plans that leads to improved future operations and a better understanding of smoke accumulation problems, impacts, and solutions. This evaluation will be included in the Daily Emission Report that is submitted to the Smoke Program Coordinator at DAQ.

4) DAQ staff will forward to the Land Manager any complaint calls that are received as a result of smoke intrusions.

VII. Requirements for Wildland Fires

A. Evaluation of Wildland Fire

1) The Smoke Program Coordinator will review the daily situation report for Utah (prepared by the Eastern Great Basin Coordinating Center) to identify wildland fires on more than 100 acres of trees (timber) or 300 acres of brush (grass, brush, pinyon/juniper). Analysis of the emissions from wildland fires in progress and residual emissions from prescribed fires, wildland fire used for resource benefits, and wildland fires will be used to evaluate smoke impacts on air quality and visibility.

2) The Smoke Program Coordinator will review the daily situation report for Utah (prepared by the Eastern Great Basin Coordinating Center) to track emissions of particulate matter or other pollutants of interest from wildland fires for the emissions inventory database.

VIII. Requirements for Wildland Fire Used for Resource Benefits

A. Burn Approval Requirements for Wildland Fire Used for Resource Benefits

1) Land Managers will notify the Smoke Program Coordinator at DAQ of any potential wildland fire used for resource benefits covering more than 20 acres. The following information will be provided:

a) Location of the fire (UTM Coordinate);
b) Active burning acres;
c) Probable fire size and daily anticipated growth in acres;
d) Type(s) of wildland fuel involved;
e) An emergency telephone number that is answered 24 hours a day; and
f) Wilderness or Resource Natural Area designation, if applicable.

2) The Smoke Program Coordinator will be involved in the planning and decision process for on-going WFURBs. The following information will be submitted to the Smoke Program Coordinator as it is being developed (federal fire policy allows 48 hours):

a) Burn plan and anticipated emissions;
b) A map, preferably with a scale of 1:62,500, (see example in Appendix D) depicting both the daytime and nighttime smoke path and down-drainage flow for a minimum of 15 miles from the burn site with smoke-sensitive areas delineated; and
c) Additional computer smoke modeling, if requested by the Smoke Program Coordinator.

3) The Smoke Program Coordinator will then approve or disapprove the smoke management element of the WFIP/Resource Benefit Fire after consulting with the Land Manager and DAQ within 3 hours of receipt of the WFIP/Resource Benefit Fire information. This decision will be based on current prescribed fire, wildland fire, wildland fire used for resource benefits, forecast meteorological conditions, and existing air quality information using the criteria on page 10, Section VI.C.(4). Daily updates will be provided by the Land Manager to the Smoke Program Coordinator at DAQ if the fire is managed as a wildland fire used for resource benefits as long as the fire remains active (>20 acres/day).

B. Daily Emission Report for WFURBs

By 0800 the day following significant activity of 50 acres or more, the Land Manager will submit the Daily Emission Report or equivalent (see Form 5) to the Smoke Program Coordinator at DAQ. The Daily Emission Report will be used by the Smoke Program Coordinator to make operational decisions for the scheduling of burns. The report will include the following information:

1) The three-letter ID, project number, Air Quality Basin, and name of Burn Boss;
2) Location (UTM Coordinate);
3) Dates of burn with 24 hour time (start day/time, end day/time);
4) Black acres by wildland fuel type;
5) Estimated wildland fuel consumption (%) by wildland fuel type;
6) Wildland fuel moisture (%) by size class;
7) Emission estimates using emission factors provided by DAQ;
8) Level of public interest/concern regarding smoke; and
9) Conformance to WFIP/Resource Benefit Fire Plan.

C. Monitoring

1) Land Managers conducting wildland fires used for resource benefits will monitor effects of the prescribed fire on smoke sensitive receptors, and visibility in Class I areas, and conformance to WFIP/Resource Benefit Fire Plan. Monitoring of nuisance complaints by the public should be recorded in the project file.

2) Land Managers will document information pertinent to wildland fire used for resource benefits that leads to improved future operations and a better understanding of smoke accumulation problems, impacts, and solutions. This evaluation will be included in the Daily Emission Report that is submitted to the Smoke Program Coordinator at DAQ.

3) DAQ staff will forward to the Land Manager any complaint calls that are received as a result of smoke intrusions.

IX. Requirements for Prescribed Fires, Wildland Fire Used for Resource Benefits or Wildland Fires

A. Management of On-going Fires (Prescribed Fires/WFURB)

1) If it is determined by the Smoke Program Coordinator, in consultation with the DAQ and Land Manager(s), that the prescribed fire, wildland fire used for resource benefits, and/or smoke transported from other locations, is degrading air quality to levels that potentially could violate air quality standards and/or permit or burn plan conditions, the Land Manager(s) will promptly initiate actions to reduce or eliminate smoke production, by stopping ignition actions on existing prescribed fires and by curtailing additional prescribed or wildland fire used for resource benefit fires.

2) The Smoke Program Coordinator is required to provide documentation of air quality evaluation made for decision in A (1) above.

B. Public Notification/Education (Prescribed Fires/WFURB/Wildfires)

1) The Land Managers and DAQ will be responsible for providing public notification and education related to the SMP, as needed. The public notification and education program will include smoke impacts from prescribed fires, wildland fire, and wildland fire used for resource benefits.

2) The Land Managers and DAQ will be responsible for providing public notification and education on the role of prescribed fire and wildland fire used for resource benefits to accomplish land management objectives.

3) The DAQ and National Weather Service will be responsible for issuing health advisories and forecast air quality alerts in accordance with existing state and federal laws as appropriate.

X. Program Management

A. Form Processing and Submittal Times

Smoke Management Plan forms will be available at www.utahsmp.net under the section titled ARequired Forms≅. Preferably, all forms should be submitted through the home page submittal functions. A copy of the form should be kept by the Land Manager in case an error occurs and a fax is required. Until the system is totally functional, each Land Manager with a three-letter identifier will assign project numbers for tracking burns, and send updates to the Smoke Program Coordinator when updates to the list occur. In order to do so, each Land Manager will have to assign this responsibility to one person. If this is not possible, the Smoke Program Coordinator will assign the project numbers and fax the project numbers to the Land Manager. Submittal of the forms is as follows:

Form 1:	Project Number	(Optional)
Form 2:	Utah Annual Burn Schedule	Due by March 15 annually
Form 3:	Pre-Burn Information	Due two weeks before beginning ignition window
Form 4:	Burn Request	Submit two business days before planned ignition
Form 5:	Daily Emission Report	Submit by 0800 day following burn
Form 6:	Hourly Plume Observation Record	(Optional)

B. Updates to SMP Home Page

Updates to the SMP home page will be routinely shown under the AWhat=s New≅ section of the main page. Procedural changes will be highlighted to keep the page user friendly.

Utah Smoke Management Program Home Page Address

www.utahsmp.net

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